

RDMA COMPLETION AND RETRANSMIT SYSTEM AND METHOD

ABSTRACT OF THE INVENTION

A system and method for maintaining ordering in completion and retransmit operations in an RDMA environment. A system is provided for handling a completion process in an remote data memory access (RDMA) environment having a RequestOut channel and a ResponseOut channel, comprising: a descriptor list for each channel, wherein each descriptor list includes a message descriptor for each message in the channel; an update mechanism for updating a message length field in the message descriptor with a sequence number of a last byte in the message whenever a channel swap occurs between the RequestOut channel and the ResponseOut channel; an acknowledgement (Ack) completion system that examines values in a completion context and compares a sequence number of a next to complete message with a last acknowledged sequence number to determine if the message should be completed; and a read request completion system that performs completion of a read request.